

TCT@ACC-i2: Invasive and Interventional Cardiology

INTERVENTIONAL MITRAL VALVE REPAIR USING THE MITRACLIP SYSTEM AFTER PRIOR SURGICAL MITRAL ANNULOPLASTY

Oral Contributions
West, Room 2022
Sunday, March 10, 2013, 9:15 a.m.-9:25 a.m.

Session Title: Structural Heart Disease (Non-TAVR)
Abstract Category: 50. TCT@ACC-i2: Mitral Valve Disease
Presentation Number: 2906-11

Authors: *Johannes Schirmer, Volker Rudolph, Britta Goldmann, Lenard Conradi, Moritz Seiffert, Michael Schlueter, Edith Lubos, Hendrik Treede, Stefan Blankenberg, Hermann Reichenspurner, Stephan Baldus, University Heart Center Hamburg, Hamburg, Germany*

Background: Redo surgical mitral valve repair carries a high perioperative risk in the presence of severely reduced ventricular function and/or relevant comorbidities. We sought to assess the feasibility of catheter-based mitral valve repair using the MitraClip system in patients in whom previous surgical annuloplasty failed to maintain initial mitral regurgitation (MR) reduction.

Methods: Since starting the MitraClip program at our center in 9/2008, a total of 6 patients (age 75 ± 12 years [range: 59-90 years]) with recurrence of symptomatic MR grade ≥ 3 following prior surgical mitral annuloplasty underwent MitraClip therapy. Time interval between mitral valve surgery and interventional procedure was 3.6 ± 4.0 years (range: 0.8-9.0 years). Risk for redo surgery was considered high by means of logistic EuroScore II of 24.5 ± 6.1 % and STS score of 18.7 ± 8.3 %, respectively.

Results: MitraClip implantation was successful in 4 of 6 patients. In these patients, procedure-related reduction in MR severity was three grades in one patient, two grades in two patients, and one grade in 1 patient. As a consequence, NYHA functional status improved from 4 to 2 in 2 patients and from 3 to 2 in the other 2 patients, respectively. One of the patients with failed MitraClip therapy underwent surgical valve repair. At 6-month follow-up, all 6 patients continued to be alive.

Conclusion: Mitral valve repair using the MitraClip system for recurrence of MR following prior surgical annuloplasty may represent a therapeutic option in a subgroup of symptomatic patients carrying a high-risk for redo surgery.